In the Claims

The following Listing of Claims replaces all prior versions in the application:

LISTING OF CLAIMS

1. (Previously presented) An electron tube, comprising:

an electrically insulating wall portion;

a multistage depressed collector (MSDC) including:

a first electrode adapted to collect electrons of a first energy level impacting the first electrode, the first electrode formed on an inside portion of said insulating wall portion and comprising a metallization layer formed on said inside portion of said insulating wall portion;

a second electrode adapted to collect electrons of a second energy level impacting the second electrode; and

an insulating portion for electrically isolating said first and second electrodes from one another; and

an electrical path coupling said first electrode to a terminal on an exterior of the tube.

2. (Previously presented) An electron tube, comprising:

an electrically insulating wall portion;

a multistage depressed collector (MSDC) including:

a first electrode adapted to collect electrons of a first energy level impacting the first electrode, the first electrode formed on an inside portion of said insulating wall

portion and comprising a metallization layer formed on said inside portion of said insulating wall portion and a cylindrical copper member including a plurality of circularly disposed fingers and slots, said fingers affixed at a distal end thereof to said metallization layer;

a second electrode adapted to collect electrons of a second energy level impacting the second electrode; and

an insulating portion for electrically isolating said first and second electrodes from one another; and

an electrical path coupling said first electrode to a terminal on an exterior of the tube.

3. (Original) An electron tube in accordance with claim 1, wherein said electrically insulating wall portion comprises a ceramic material.

4. (Original) An electron tube in accordance with claim 2, wherein said electrically insulating wall portion comprises a ceramic material.

5. (Original) An electron tube in accordance with claim 3 wherein said tube further comprises a fluid cooling apparatus in thermal contact with an exterior of said tube.

6. (Original) An electron tube in accordance with claim 4 wherein said tube further comprises a fluid cooling apparatus in thermal contact with an exterior of said tube.

7. (Original) An electron tube in accordance with claim 5 wherein said ceramic comprises a material selected from the group consisting of: aluminum oxide, beryllium oxide and aluminum nitride.

8. (Previously presented) An electron tube in accordance with claim 3 wherein said tube further comprises a fluid cooling apparatus in thermal contact with an exterior of said tube.

9. (Currently amended) An electron tube, comprising:

a linear beam electron tube, comprising:

vacuum envelope means for maintaining a vacuum in the tube, said vacuum envelope means including an electrically insulating wall portion;

first means for conducting electricity disposed on an inside of said insulating wall portion, said first means comprising a layer of metallization configured to collect ~~collecting~~ electrons of a first energy level;

second means for conducting electricity disposed on an inside of said insulating wall, said second means collecting electrons of a second energy level;

insulating means for electrically isolating the first and second means for conducting electricity; and

terminal means disposed on an outside of said insulating wall portion and electrically coupled to said means for conducting electricity.

10. (Canceled)

11. (Previously presented) The electron tube of claim 9, wherein said first means for conducting electricity comprises a cylindrical copper member having a plurality of circularly disposed fingers and slots.

12. (Original) The electron tube of claim 11, wherein distal ends of said fingers are brazed to said insulating wall portion.

13. (Previously presented) The electron tube of claim 10, wherein said first means for conducting electricity comprises a cylindrical copper member having a plurality of circularly disposed fingers and slots and wherein distal ends of said fingers are brazed to said layer of metallization.

14. (Original) The apparatus of claim 12, wherein said vacuum envelope means comprises a ceramic material.

15. (Original) The apparatus of claim 13, wherein said vacuum envelope means comprises a ceramic material.